

# *Conceveiba parvifolia* (Euphorbiaceae), a New Species from Panama and Colombia

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**ABSTRACT.** *Conceveiba parvifolia* from Darién, Panama, and Antioquia, Colombia, is described and illustrated.

Two wind-thrown trees encountered on the forested slopes above the abandoned Cana gold mine in Darién are apparently the first known representatives of the genus *Conceveiba* Aublet from Panama, although the genus was previously known from both neighboring Costa Rica and Colombia. Specimens from these two trees key readily to the subtribe Conceveibinae of the Alchorneae (Acalyphoideae) in Webster's synopsis (1994). Within that subtribe, however, the Panamanian collections combine characters currently used to distinguish *Conceveiba* and *Gavarretia* Baillon, i.e., on the one hand the sepals of the pistillate flower are separate (usually), the style branches blunt, and the anthers muticous (as in *Conceveiba*), while on the other hand the sepals of the pistillate flower are eglandular, and the ovary is 2-locular (as in *Gavarretia*, although some species of *Conceveiba* are similarly eglandular). The generic boundaries were not clear in this subtribe even before this intermediate taxon further blurred them, and I have chosen to name the new species in *Conceveiba* since I agree with Webster (1994) that Mueller's inclusion (1874) of *Gavarretia* as a section of *Conceveiba* may be justified.

***Conceveiba parvifolia* McPherson, sp. nov.**

TYPE: Panama. Darién: near Cana mine S of El Real (Cerro Pirré massif), 7°45'N, 77°40'W, ca. 900 m, 26 Aug. 1987, *McPherson 11607* (holotype, PMA; isotypes, BM, COL, CR, DAV, EAP, F, G, GH, HUA, K, MEXU, MICH, MO, NY, P, US). Figure 1.

Species foliis minoribus (2.7–16.5 cm × 0.8–5.5 cm), inflorescentiis masculis brevibus (10 cm) fere eglandulatis, floribus masculis non fasciculatis, sepalis floris feminei 4(–5) eglandulatis, ovario biloculari, stylis 2 semiconnatis a congeneribus diversa.

Tree (6–)15–20 m; colored exudate absent; youngest branches stellate-puberulent, without lenticels, terete or somewhat ridged, the older ones glabrate

and bearing elongated lenticels. Leaf blade (2.7–)3.5–8.0(–16.5) cm long, (0.8–)1.8–4.0(–5.5) cm wide, elliptical-oblong, obtuse at the base, acuminate at the apex, the margin crenate (sometimes obscurely so) with 5–8 mucronate teeth, the upper surface sparsely stellate-puberulent before maturity, rapidly glabrate, the lower surface densely stellate-puberulent before maturity, eventually glabrate, often with 1–several embedded glands, secondary veins 6–10 on each side of the midrib, the reticulum slightly raised on the upper surface and more strongly raised on the lower; petiole 1.3–4.0(–4.8) cm long, 0.5–1.0 mm diam., semicircular in cross section, sparsely stellate-puberulent, a distal pulvinus usually discolored and thereby distinguishable, 2–3 mm long, sometimes slightly swollen, a smaller proximal pulvinus often present; stipules subulate, 2–4 mm long, up to 0.5 mm wide, stellate-puberulent, quickly caducous. Plants dioecious; inflorescences terminal or from the axils of the most distal leaves. Staminate inflorescences paniculate or less often racemose, up to 10 cm long, the axes stellate-puberulent, bracts triangular, up to 2 mm long, stellate-puberulent, each bract often accompanied by two smaller bracteoles, both bracts and bracteoles sometimes bearing weakly differentiated glabrous glandular patches; pedicels 1–1.5 mm, not fasciculate, glabrous; buds ca. 2 mm diam., apiculate; sepals valvate, 2 or 3 in number, 2.5–3.5 mm long, up to 3 mm wide, concave, eglandular, green, glabrous without, somewhat granular-puberulent within at base of filaments; petals and disk absent; stamens 35–42, filaments up to 3 mm long, free or the central ones connate basally, glabrous, anthers ca. 0.8 mm long, rounded, somewhat puberulent; pistillode absent. Pistillate inflorescences racemose, up to 5 cm long (occasionally the most proximal flowers subtended by only slightly modified leaves), the axes stellate-puberulent, eglandular; bracts not seen, rapidly caducous; pedicels 4–13(–18) mm long, somewhat inflated distally, stellate-puberulent, usually bearing two bracteoles ca. 2 mm long, these caducous, usually attached near the pedicel base but sometimes attached subapically and then mistakable for sepals;





Figure 1. *Conceveiba parvifolia* McPherson. —A. Twig bearing staminate inflorescences. —B. Portion of staminate inflorescence. —C. Staminate flower. —D. Pistillate inflorescence. —E. Pistillate flower with 4 sepals and a bracteole. (A–C based on *McPherson 11621*; D, E based on *McPherson 11607*.)



sepals 4(–5) in number, 2–5 mm long, subulate, free or occasionally two of them partially connate, eglandular, pale green, stellate-puberulent; petals, disk, and staminodes absent; pistil 6–9 mm long, stellate-puberulent, ovary ca. 3 mm long, 2-locular; styles 2 in number, fused basally into a column 1.5–3 mm long, free and bifid distally, these free portions stigmatic adaxially and ca. 3 mm long in total, the ultimate branches ca. 2 mm long, blunt-tipped; ovules 1 per locule. Fruit unknown.

From the seven or eight other members of its genus and from the monotypic *Gavarretia*, *Conceveiba parvifolia* can be separated by its smaller leaves, shorter and only obscurely glandular staminate inflorescences, non-fasciculate staminate flowers, and pistillate flower with 4(–5) eglandular sepals, a bilocular ovary, and 2 styles connate half their length.

At the suggestion of Grady L. Webster, I examined two additional specimens that proved to belong to the new species. These collections, made

by R. Callejas, F. J. Roldán, and J. Betancur of HUA, extend the distribution of *Conceveiba parvifolia* from easternmost Central America well into the northwestern corner of South America.

*Paratypes.* PANAMA. **Darién:** near Cana mine S of El Real (Cerro Pirré massif), 7°45'N, 77°40'W, ca. 900 m, 26 Aug. 1987, *McPherson 11621* (BM, COL, CR, DAV, F, HUA, K, MEXU, MICH, MO, NY, PMA, US). COLOMBIA. **Antioquia:** Municipio Anorí, via Dos Bocas-Providencia, 7°26'N, 74°56'W, 100–120 m, 9 Jul. 1987, *Callejas et al. 4477* (MO); Municipio Remedios, 10–12 km NW de Remedios en la vía a Zaragoza, 7°05'N, 74°15'W, 300 m, 16 Sep. 1987, *Callejas et al. 5261* (MO).

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#### Literature Cited

- Mueller, J. 1874. Euphorbiaceae [part 2]. Pp. 293–750 in Martius, *Flora Brasiliensis*, Vol. 11. Cramer, Weinheim.
- Webster, G. L. 1994. Synopsis of the genera and supra-generic taxa of Euphorbiaceae. *Ann. Missouri Bot. Gard.* 81: 33–144.